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PATENT

UNITED STATES PATENT APPLICATION

of

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for

HOLDER FOR CONSTRUCTION PLANS

CROSS-REFERENCE TO RELATED APPLICATION

[0001] This is a continuation-in-part of copending U. S. application Serial No. 09/775,752, filed on 01/31/2001, which will issue as U. S. patent number 6,705,032 on 03/16/2004.

BACKGROUND OF THE INVENTION

Field of the Invention

[0002] This invention relates to a device for storing and displaying construction plans.

Description of the Related Art

[0003] A number of patents have been issued for rollers which store and display elongated, flexible material, such as maps.

[0004] These include United States patent numbers 1,812,171; 1,823,996; 2,589,641; 4,157,626; 4,525,946; 4,794,715; 5,392,549; 5,966,854; and 6,038,800.

[0005] Except for patent numbers 2,589,641; 4,157,626; and 5,996,854, the devices covered by the preceding patent are complex and subject to be damaged by the dirt that exists around construction sites.

[0006] The device of patent number 2,589,641 has no means for attaching the wallpaper that it holds to the cylindrical rod and also appears merely to rotate the roll of wallpaper, having no described means for rotating the rod.

[0007] The technology of patent number 4,157,626 does not employ a roller or cylinder.

And the Roll-up Information Display of patent number 5,966,854 only utilizes a "self-coiling display sheet."

[0008] The Motor-driven Map Holder of patent number 4,794,715 has a longitudinal groove in a cylindrical rod for attaching one end of the elongated, flexible material to the rod; but, as noted above, the Motor-driven Map Holder of that patent is complex and subject to having its operation degraded by the dirt around a construction site.

[0009] Finally, the similarly complex Map Display and Storage Device of patent number 5,392,549 employs separate knobs attached to the cylindrical rods.

BRIEF SUMMARY OF THE INVENTION

[0010] The present Holder for Construction Plans is simple in structure so that its operation will not be adversely affected by the dirt at a construction site.

[0011] A longitudinal groove in a cylindrical rod retains a folded end of the construction plans in a first embodiment, and the rod is rotated simply with a first end of the cylindrical rod. In a second embodiment, the cylindrical rod comprises a primary section containing a linear segment releasably attached to the primary section.

[0012] Moreover, the Holder is adapted for being removably but securely attached to a motor vehicle.

BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING

[0013] Figure 1 is an isometric view of the Holder for Construction Plans.

[0014] Figure 2 illustrates a knob used for turning the cylindrical rod.

[0015] Figure 3 presents an isometric view of an optional embodiment of the Holder for Construction Plans.

DETAILED DESCRIPTION OF THE INVENTION

[0016] Construction plans are often bulky and difficult to store.

[0017] The present Holder for Construction Plans enables such plans to be rolled for storage and unrolled for review.

[0018] The Holder comprises a base **1** with a first perpendicular segment **2** attached to a first end **3** of the base **1** and a second perpendicular segment **4** attached to a second end **5** of the base **1**. The first perpendicular segment **2** contains an aperture **6** through which a first end **7** of a cylindrical rod **8** extends.

[0019] The second perpendicular segment **4** contains a cavity **9** to releasably retain the second end **10** of the cylindrical rod **8**.

[0020] The first end **7** of the cylindrical rod **8** is shaped in the form of a knob **11**.

[0021] An opening **12** is transversely located in the cylindrical rod **8** near the first end **7** of such rod **8** but sufficiently far from such first end **7** that such opening **12** will be situated between the first perpendicular segment **2** and the second perpendicular segment **4** when the second end **7** of the cylindrical rod **8** is retained by the cavity **9** in the second perpendicular segment **4**. In

order to preclude the cylindrical rod 8 from inadvertently slipping from the second perpendicular segment 4, a peg 13 is removably inserted into the opening 12. The dimensions of the peg 13 are such that friction will removably retain it within the opening 12.

[0022] Optionally, the peg 13 is spring-loaded so that a first end 100 of the peg can be depressed to allow the cylindrical rod 8 to be inserted through the aperture 6 in the first perpendicular segment 2; after passing through the aperture 6, the first end 100 returns to an extended position to retain the cylindrical rod 8 in place. Then the peg 13 need not necessarily be removable.

[0023] The cylindrical rod 8 contains a longitudinal groove 14. When an end 15 of the construction plans 16 is folded back upon itself, such folded end 15 is inserted into and retained by the groove 14. The construction plans 16 can then be rolled or unrolled by turning the knob 11.

[0024] Optionally, rather than having the longitudinal groove 14, the cylindrical rod 8 comprises, as shown in FIG. 3, a primary section 101 and a linear segment 102 releasably attached to the primary section 101. Releasable retention of the linear segment 102 is preferably accomplished with a fastener 103 such as a screw or bolt, one or more apertures 104 in the linear segment 102, and one or more mating apertures 105 in the primary section 101.

[0025] Magnets 17 may, furthermore, be placed on the bottom 18 of the base 1 for removably retaining the Holder on a vehicle.

[0026] Alternatively, countersunk apertures 106 are located in the base 1 for retaining the base 1 to a table, saw horse, or the like.

[0027] Additionally, the base 1 may contain a drawer 107 and have one or more spring clips 108 attached to it for retaining a ruler or the like.